


Model Number 1631-04C		STRAIN GAGE LOAD CELL		Revision: E ECN #: 43825	
Performance	ENGLISH	SI		OPTIONAL VERSIONS	
Measurement Range	2000 lb	8896 N	[5]	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.	
Sensitivity(± 10 %)	2 mV/V	2 mV/V	[6]		
Non-Linearity	≤ 0.05 % FS	≤ 0.05 % FS			
Hysteresis	≤ 0.03 % FS	≤ 0.03 % FS			
Non-Repeatability	≤ 0.02 %RO	≤ 0.02 %RO			
Resonant Frequency	2.4 kHz	2.4 kHz			
Creep(in 20 minutes)	≤ 0.08 %	≤ 0.08 %			
Environmental				NOTES:	
Overload Limit	3000 lb	13.3 kN		[1]Nominal.	
Load Limit(Side Force, F _X or F _Y)	200 lb	890 N	[3]	[2]Calibrated at 10 VDC, usable 5 to 20 VDC or VAC RMS.	
Load Limit(Bending Moment, M _X or M _Y)	400 in-lb	45.2 Nm	[3]	[3]Singularly applied, i.e. no other extraneous loads.	
Load Limit(Axial Torque, M _Z)	400 in-lb	45.2 Nm	[3]	[4]Over compensated operating temperature range.	
Temperature Range(Operating)	0 to +200 °F	-18 to +93 °C		[5]FS - Full Scale.	
Temperature Range(Compensated)	+70 to +170 °F	+21 to +77 °C		[6]RO - Rated Output.	
Temperature Effect on Output(Maximum)	± 0.0008 %Reading/°F	± 0.0015 %Reading/°C	[4]	[7]See Outline Drawing 46138 for Complete Dimensions	
Temperature Effect on Zero Balance(Maximum)	± 0.0015 %FS/°F	± 0.027 %FS/°C	[4]		
Electrical					
Bridge Resistance	350 Ohm	350 Ohm	[1]		
Excitation Voltage(Recommended)	10 VDC	10 VDC	[2]	Entered: AP Engineer: PE Sales: JC Approved: JSD Spec Number:	
Insulation Resistance	>5x10 ⁹ Ohm	>5x10 ⁹ Ohm		Date: 2/16/2015 Date: 2/16/2015 Date: 2/16/2015 Date: 2/16/2015 45999	
Zero Balance	± 1 % FS	± 1 % FS			
Output Polarity	+Tension	+Tension			
Physical					
Size (Length x Height x Width)	2.00 in x 3.0 in x 1.0 in	51.0 mm x 76.2 mm x 25.4 mm	[7]	<p>PCB Load & Torque, Inc. 24350 Indoplex Circle Farmington Hills, MI 48335 UNITED STATES Phone: 866-684-7107 Fax: 716-684-0987 E-Mail: ltinfo@pcbloadtorque.com Web site: http://www.pcbloadtorque.com</p> 	
Weight	1.2 lb	544 g			
Mounting Thread	1/2-20 Thread	No Metric Equivalent			
Housing Material	Nickel Plated Steel	Nickel Plated Steel			
Sensing Element	Strain Gage	Strain Gage			
Deflection at Full Scale Capacity	0.003 in	0.05 mm			
Electrical Connector	10 ft - Integrated Cable	10 ft - Integrated Cable			
Electrical Connection Position	Side	Side			
<i>All specifications are at room temperature unless otherwise specified.</i>					
<i>In the interest of constant product improvement, we reserve the right to change specifications without notice.</i>					